

*Extreme Heights* rock climbing gym offers two plans for climbers wishing to climb at their gym. Plan A offers reduced day passes for \$4 a day if climbers pay a monthly membership fee of \$75. Plan B offers day passes to nonmembers for \$9 a day.

- a) Let  $x$  represent the number of days a climber visits *Extreme Heights* and let  $y$  represent the total cost. Write the two equations that represent the costs for the two plans.

Plan A       $y = 75 + 4x$       Plan B       $y = 9x$

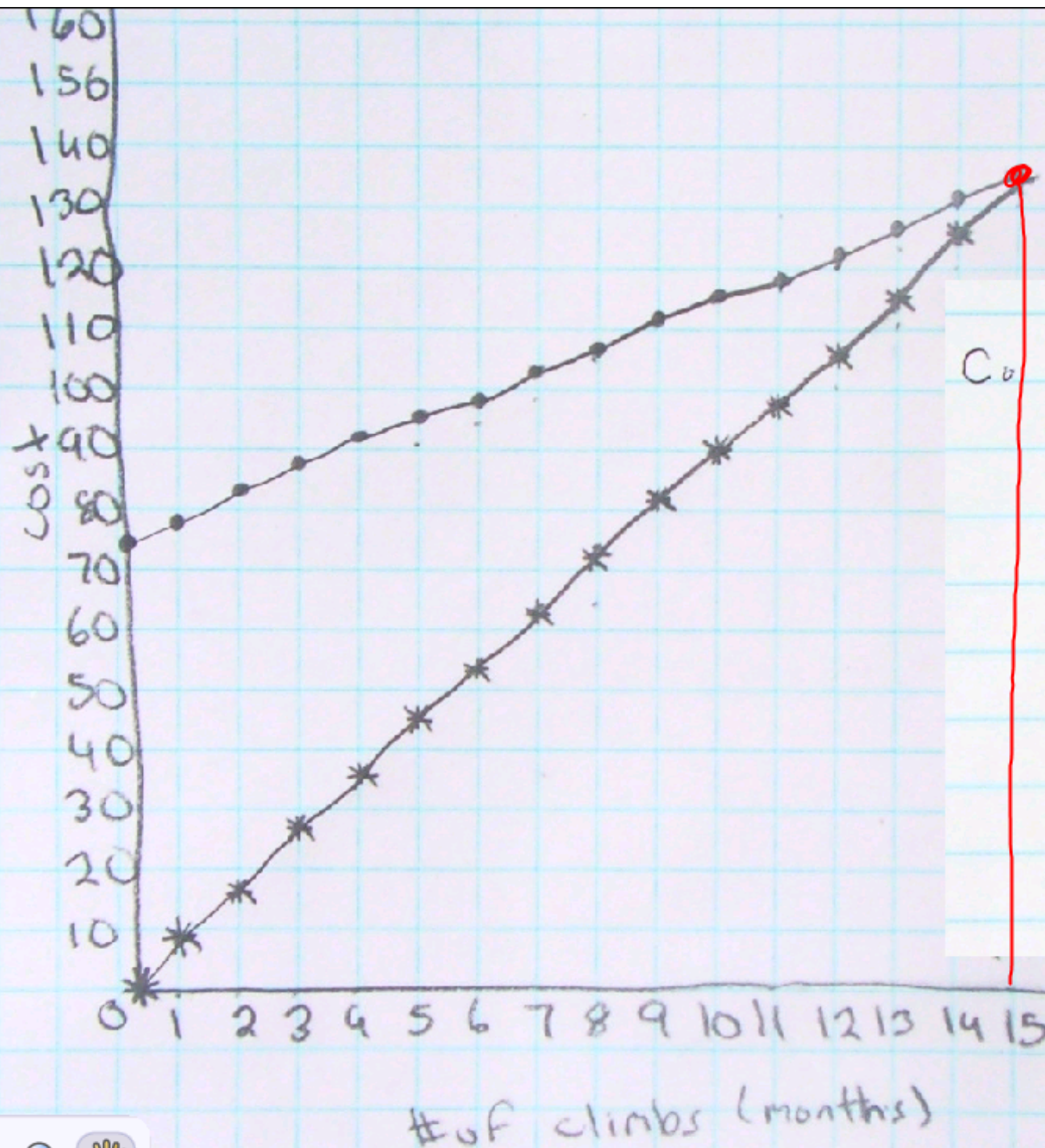
- b) Graph the two equations on graph paper. What does the point of intersection represent?

See next page

- c) How many days a month would you have to climb as a member to save money on Plan A? Explain.

15 climbs they are equal

16 Plan A is better

C<sub>0</sub>

x	A	B
0	75	9
1	79	18
2	83	27
3	87	35
4	91	45
5	95	54
6	99	63
7	103	

